

the agar, very low levels of the immunoglobulins can be measured routinely, and normal ranges of these proteins in certain body fluids such as nasal secretions have been established. An elevated serum IgM or IgG often signifies a response to an infection. IgE serum elevation may reflect an allergic disorder. IgA serum levels also may vary with host response to infection; but more important, IgA is the major or only immunoglobulin found in respiratory secretions. Individual and circadian variations of respiratory IgA levels have been documented, and this variation may play a role in susceptibility to infection, since a decrease or absence of any immunoglobulin can be associated with increased incidence of infection.

The Ig levels cannot be used alone for a diagnosis of any one disease—except the dysgammaglobulinemias—but may be useful in connection with history, physical examination, and other tests in determining the overall ability of the individual to handle infections.

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Bell's Palsy (Facial Paralysis)

THE DIAGNOSIS Bell's palsy implies, by definition, a non-specific involvement of the peripheral component of the seventh cranial nerve (facial nerve) with paralysis of structures innervated by the facial nerve.

The possibility of a systemic cause must always be considered and an evaluation by the generalist with medical studies as necessary should be performed.

If paralysis is on the basis of truly non-specific cause, medical management is in order. Treatment other than that is supportive with special attention to the eye to prevent corneal disease.

If the patient is seen early (preferably within 48 to 72 hours) steroids are the drug of choice.

Ninety percent of patients will recover spontaneously within three to six weeks. The remaining 10 percent will be left with a residual paresis or paralysis.

Special studies to predict who these 5 percent will be have been advocated and surgical intervention recommended. The studies consist of electri-

cal studies for measurement of electrical nerve potentials.

Responsibility of management and treatment must be that of the primary physician, with consultation for those patients who do not respond to medical management.

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Some Aspects of Dizziness

THE SENSE OF MOVEMENT (subjective vertigo) or the actual illusion of objects moving (objective vertigo) is a strong indication that the vestibular system is involved in the abnormality. On the other hand, unsteadiness, not as neatly defined as true vertigo, is not commonly related to the vestibular system. An otoneurologic evaluation of the patient complaining of vertigo necessarily includes a detailed history regarding: (1) the onset of the symptoms, (2) their character, duration, and mode of cessation, (3) whether they are single episodes or repeated, and (4) associated symptoms such as tinnitus, hearing loss, syncope, and palpitations. The examination itself must include evaluation of the cranial nerves, extraocular movements, cerebellar tests (including Romberg, modified Romberg, and pastpointing), tests for dysdiadochokinesis, vestibulospinal tract tests (such as position maintenance of extended arms with eyes closed), and electronystagmographic (ENG) analysis of eye movements. The electronystagmographic analysis of the eye movements should include: (1) *pendular tracking*, which can give evidence of abnormalities at the level of the oculomotor nuclei, (2) *calibration*, which not only allows quantitation of the ENG tracings but its qualitative pattern can give clues as to a peripheral or central nature of the disorder, (3) *optokinetic stimulation* which when recorded as an isolated abnormality is supportive of a cortical lesion, and (4) *positional testing* with particular attention to latency of nystagmus, associated vertigo, and the duration of the positionally provoked nystagmus for more than two minutes. *Rotational testing* is not routinely used in many laboratories but holds promise in the future perhaps even in differentiating between sites of peripheral lesions. *Caloric testing* using the Hallpike method is usually modified so that electronystagmographic analysis is obtainable with stimulation and recording in darkness and with